DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-006907 Address: 333 Burma Road **Date Inspected:** 08-Apr-2009

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: ZPMC and ABF **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component:** SAS tower

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Wai Pau, was present during the times noted above for observations relative to the work being performed.

Bay #10 South and North Tower Shop

South tower lift#1:- Caltrans QA Inspector observed six welders performed FCAW process on PJP welds for corner diagonal stiffener that connected skin plate C to D and B to C. The PJP welding located along at elevation 9m to 47.6m diaphragm. The minimum preheat and maximum interpass temperature requirements for FCAW PJP welds are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

North tower lift#2:- Caltrans QA Inspector observed five ZPMC welders in process FCAW root pass on interior diaphragms of skin plate A. The interior diaphragms located at the elevation 53m to 80.75m The minimum preheat and maximum interpass temperature requirements for FCAW root pass welds are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

South Tower Lift #2:-Caltrans QA Inspector observed a welder performed FCAW repair process on inner corner longitudinal seam weld that connected skin plate B and C. The repair weld area located at elevation 80.75m diaphragm section. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

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South Tower Lift #2:-Caltrans QA Inspector observed four welder performed FCAW fillet weld repair and grinding process on fit lug welds and diaphragm welds of east tower lift #2. The fit lugs located at elevation 53m to 80.76m of skin plate A. The FCAW repair welding was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

Bay #11 East and West Tower Shop

East Tower Lift#1:- Caltrans QA Inspector observed seven welders performed FCAW process on CJP weld for corner diagonal stiffener that connected skin plate C to D and B to C. The welding located at elevation 9m to 47. 6m diaphragm. The minimum preheat and maximum interpass temperature requirements for FCAW CJP weld are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

East Tower Lift #2:-Caltrans QA Inspector performed final VT inspection on the fig lug welds and interior diaphragm welds of skin plate A, D and E. The fig lug welds and interior diaphragm welds are located at elevation 56m to 68m. All the welds for VT inspection have been accepted by ZPMC and ABF QC prior Caltrans QA inspection. Base on Caltrans inspection, the welds appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

As noted within the report above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 13482570045, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer